

# Investigation on the Levels of Aggression of Physical Education and Sport School Students from Demographic Variables Perspective: Istanbul Ayvansaray University

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## Abstract

The aim of this study is to determine whether the level of aggression of the students of Physical Education and Sports School at Istanbul Ayvansaray University differs according to some demographic variables. For this purpose, 180 students from the Physical Education and Sport School participated voluntarily who got trainings from Istanbul Ayvansaray University's Coaching Education Department, Sports Management Department, Recreation and Exercise and Sports Sciences Department. Survey data were obtained from the "personal information form" and the "Aggression Scale" developed by Buss-Perry, adapted to Turkish by Madran (2013). SPSS 21 package program was used to analyze the obtained data. In the analysis of the data, T-Test and One Way analysis of variance analysis were used. The difference between the variables was interpreted on the basis of  $p < 0.05$  significance level. As a result of the study, although there were significant differences between the aggression

levels of the students according to age and sex, the differences between the sections they studied and the level of aggression according to the field they were doing were meaningless. Students with alcohol and cigarette addictions were found to have higher levels of aggression. It was found that the mean score of male students was higher than that of female students.

**Keywords:** Aggression, Aggression level, Sport, University student

## 1. Introduction

In general, the concept of aggression can be described as behavior toward harm, but when it is human vulnerable it is difficult to define it in full (Korkut, 2002). Aggressiveness is that an individual has the thought of attempting to harm another individual (Köknel, 2000). Aggressiveness can also be described as hurtful and disturbing behavior towards another creature or object (Boxer & Tisak, 2005). Aggression is the “total destructive behavior of anger, fury and hatred” in order to harm others in physical and mental terms. Aggression “refers to acts of personal suffering and material harm that are considered aggressive by the social and cultural environment, depending on direct and indirect reasons (Şahin, 2003). Freud’s aggression is the turning of the self-destructive tendencies of man into objects on the outside world. People fight against other people or develop behavior against them. Because the desire to destroy itself and the instincts of life can be ineffective or one can substitute for another (Geçtan, 1999). Erich Fromm defines aggression as any move that destroys another human, animal, or inanimate object. Aggression; is divided into ‘soft aggression’ and ‘cruel aggression’ (Fromm, 1993).

As a result; aggression can be defined as “an organized, persistent tendency that involves physical and emotional goals such as consciously and deliberately destroying, controlling, and dominating over the social environment or a person” (Dervent, 2007). How aggression is defined is seen as a negative social skill that can’t be accepted as an individual’s self-destructive behavior.

When we look at the literature, concepts such as aggressiveness, aggressiveness under command, aggression under command, hostility aggression, social reward, and aggressiveness and assertiveness are seen as reasons for aggressiveness.

It is constantly emphasized that the sport is an important phenomenon that brings people and societies closer together, socializes individuals, and has a fundamental philosophy of peace, fraternity and friendship. It is known that in the past, wars were interrupted during the Olympics (Özbaydar, 1983). Sports aggression is expressed as any verbal or physical act that is carried out, by one or more persons (athlete, coach, and spectator) who are affected by psychological, biological or social factors, in order to reach a target which is beyond the specified rules specific to the sports branch, during sporting competitions and events (Acet, 2005). A sport is a game and competition that has to be the best for the intended goal, the one that requires the most work. Today, young people and adults who constitute fan groups and have low levels of emotional and cognitive development are displaying an aggressive attitude by imitating supporters’ leaders because they can’t socialize because of various reasons and can’t control aggression tendencies (Var, 2008). Combined with the colors of the team they

are in, young people, who identify themselves with this phenomenon, tie their goals, expectations, team strength, superiority and success to their teams. As part of the team, young people who defend it believe that they have a role and place in society. They think that the acts of aggression and violence they have done for the team have brought them a reputation (Köknel, 2000). Surveys reveal that watching sports competitions does not reduce the aggressiveness of individuals, but also increases the aggressiveness by watching violent sports.

The increase in violence and aggression that spread throughout the society is also reflected in sports organizations. The growth of the sports economy, along with the spread of sports in large quantities, has caused competition to become harder. Hardening competition forces the elements in the sport, vicious conflicts, unethical behavior, fighting and immorality, and an aggressive grip. The sport has lost its original value. It has been observed that in sports competitions the aggressive attitudes are often exhibited on the side of the winner. Recently, terms such as “aggressive defense” involving aggression in the sport indicate that there is a situation that affirms these negative statements. It is supported, even rewarded, as long as it does not exceed the limits of the specified rules. In daily life, however, aggressive behavior is either restricted by social rules or laws, sanctions are imposed (Erşan et al., 2009).

In order to prevent aggression and violent actions in sports, it is necessary to know the causes of aggression, to know the responsibilities of coaches, athletes and managers in the sport scene. Media organizations should avoid negative publications and educate fans to act fair-play (Kabak, 2009). We are faced with aggression at a rapid pace throughout life and in sports. Aggressive attitudes in our everyday life; fatigue of working life, financial difficulties, difficulties of ordinary life arise as a result, while in order to prevail in sports activities, it is permissible because it is the purpose of blocking the other side. The reason that we will examine within the specified information is the question of whether there is a significant relationship between the aggression levels of university students who play sports and different variables, which is the problem of our research.

## **2. Method**

### *2.1 Research Model*

This research is a relational study designed according to the survey model, which is one of the quantitative research methods. The survey model provides a quantitative or numerical description of trends, attitudes or opinions in the population through studies on a sample selected from a population (Creswell, 2017).

The hypotheses formed and tested within the research are as follows:

H1: There is a significant difference between the genders and the levels of aggression of the students of School of Physical Education and Sports.

H2: There is a significant difference between ages and aggression levels of students of School of Physical Education and Sports.

H3: There is a significant difference between the levels of aggression and the departments where the students of School of Physical Education and Sports are educated.

H4: There is a significant difference between the level of aggression and the sports performed by the students of School of Physical Education and Sports.

H5: There is a significant difference between smoking habits and aggression levels of the students of School of Physical Education and Sports.

H6: There is a significant difference between alcohol use habits and aggressiveness levels of the students of School of Physical Education and Sports.

## *2.2 Population and Sampling*

The scope of our research was the students at the Istanbul Ayvansaray University continuing their education in the departments of Coaching Education, Sports Management, Recreation and Exercise and Sports Sciences in the 2018-2019 school years.

After explaining the purpose of the survey, the survey was distributed to 210 students randomly. However, 30 missing, incorrect, and incorrectly filled surveys were not evaluated. For this reason, the sample of the research consists of a total of 180 students considering this deficiency.

## *2.3 Collection of Data*

Survey papers were used as data collection tools in the survey. The survey used in the research consists of two parts. In the first part, there are questions to determine demographic information. In the second part, "Aggression Scale" developed by Buss Perry, in which students' aggression attitudes are examined. Buss-Perry "Aggression Scale" is one of the most commonly used aggression scales in the literature. Buss Perry aggression scale consists of 5 likert and 29 items. 9 items of these items (13, 8, 2, 11, 25, 16, 29, 22, 5) are physical aggression, 8 items (20, 24, 3, 26, 10, 15, 7, 17) Enmity, 7 items (19, 28, 1, 18, 9, 23, 12) Anger, 5 items (27, 6, 21, 14, 4) constitute the sub-topics of verbal aggression. High scores from the subscales of the scale indicate that the individual has a high level of performance. The items of the scale prepared in five types of likert types are coded as (1) Strongly disagree; (2) Disagree; (3) Neither agree nor disagree; (4) Agree; (5) Strongly agree. Cronbach Alpha method was used to find the reliability coefficient of the instrument and the reliability coefficient of the scale was; 0.8 for physical aggression, 0.48 for verbal aggression, 0.76 for anger and 0.71 for hostility. The total Cronbach Alpha value was found to be 0.85.

## *2.4 Analysis of Data*

The data were collected and then analyzed with the SPSS 21 packet program. T-Test and One Way analysis of variance were used in the analysis of the data.

## **3. Results**

The demographic distributions of the students who participated in the research were examined first and then the analysis was made according to the demographic characteristics

of the students to determine the aggressiveness levels of the participants.

Table 1 shows the distributions of the data obtained according to demographic variables, gender, age, department, student class, monthly income, sports branch, smoking and alcohol use variables.

Table 1. Demographic findings related to the students attending the survey

Variable		Frequency (n)	Percent (%)
Gender	Female	57	31.7
	Male	123	68.3
Age	17-20	112	62.2
	21-24	49	27.2
	25 and above	19	10.6
Your department	Sports Management	56	31.1
	Coaching Training	54	30.0
	Recreation	29	16.1
	Exercise and Sports Sciences	41	22.8
Your Section	Individual Sports	64	35.6
	Team Sports	116	64.4
Do you smoke?	Yes	62	34.4
	No	118	65.6
Do you use alcohol?	Yes	55	30.6
	No	125	69.4
	Total	180	100

When we look at demographic characteristics, 57 of the students participating in the study are female and 23 are male students. 112 of the students who completed the questionnaire were between the ages of 17-21 and 49 were between the ages of 21-24. 19 students are age 25 and over. When looking at the distribution of the department, 56 students are studying in Sports Management, 54 Coaching Education, 29 Recreation and 41 students in Department of Exercise and Sport Sciences. If we look at the classes the students are reading, most of the research is made up of 3rd grade students. The monthly income of the 27 students is between 0-500 TL, the monthly income of 55 students is between 501-999 TL and the monthly income of 57 students is between 1000 and 1499 TL. The monthly income of 61 students is

over 1500 TL. 64 of the students who participated in the study are engaged in Individual Sports and 116 are in Team Sports. Among participants who voluntarily participated in the study, 62 of them do smoking and 118 do not. 55 students use alcohol and 125 students do not use alcohol.

Table 2. T-Test results according to gender variable of students attending the survey

	<b>Gender</b>	<b>n</b>	<b>x</b>	<b>S.D.</b>	<b>t</b>	<b>p</b>
Physical aggression	Female	57	3.506	0.532	.755	0.013
	Male	123	3.731	0.605		
Enmity	Female	57	3.489	0.632	1.271	0.004
	Male	123	3.786	0.604		
Anger	Female	57	3.411	0.604	.279	0.007
	Male	123	3.685	0.662		
Verbal aggression	Female	57	3.561	0.646	.096	0.069
	Male	123	3.751	0.638		

A statistically significant difference was found between the groups as a result of the independent sample t test analysis conducted to determine whether there was a difference between the gender and aggression levels of the students of Physical Education and Sports School. As a matter of fact, the “p” value is less than 0.05. It is seen that there is a meaningful difference in the physical aggression, hostility and anger sub-dimensions of the students compared to p.0.05 significance level. The average score of male students is higher than that of female students. A statistically significant difference was not found in the verbal aggression sub-dimension. As a matter of fact, the “p” value is greater than 0.05.

For this reason, we hypothesize that there is a significant difference between the gender and aggression levels of the students of the Physical Education and Sport School that we have established before.

Table 3. Results of one-way ANOVA according to the age groups of surveyed students

	Age	n	x	S.D.	t	p
Physical aggression	17-20	112	3.733	.563	2.271	0.106
	21-24	49	3.537	.537		
	25 and above	19	3.549	.591		
Enmity	17-20	112	3.789	.579	3.704	0.027
	21-24	49	3.510	.683		
	25 and above	19	3.486	.663		
Anger	17-20	112	3.693	.616	3.436	0.034
	21-24	49	3.472	.753		
	25 and above	19	3.360	.504		
Verbal aggression	17-20	112	3.782	.603	3.176	0.044
	21-24	49	3.514	.707		
	25 and above	19	3.610	.651		

One-way analysis of variance (ANOVA) was conducted to determine whether the aggression level scale differed in terms of age groups of students, and a statistically significant difference was found between the groups. As a matter of fact, the “p” value is less than 0.05. Physical aggression, anger, hostility and sub-dimensions of students aged 17-20 were found to be higher than the average age group students. A statistically significant difference was not found in the verbal aggression sub-dimension. As a matter of fact, the “p” value is greater than 0.05.

For this reason, the hypothesis that there is a significant difference between ages and aggression levels of the students of Physical Education and Sports School is accepted. Table 3 reveals that the aggression tendencies of the young people between the ages of 17-20 are higher than the other age groups.

Table 4. Results of One-Way ANOVA, of the students participating in the survey, according to the department of the students

	<b>Department</b>	<b>n</b>	<b>x</b>	<b>S.D.</b>	<b>t</b>	<b>p</b>
Physical aggression	Sports Management	56	3.682	.545	0.830	0.479
	Coaching Training	54	3.584	.696		
	Recreation	29	3.793	.444		
	Exercise and Sports Sciences	41	3.636	.594		
Enmity	Sports Management	56	3.683	.576	1.327	0.267
	Coaching Training	54	3.652	.679		
	Recreation	29	3.896	.526		
	Exercise and Sports Sciences	41	3.612	.677		
Anger	Sports Management	56	3.665	.670	2.558	0.057
	Coaching Training	54	3.526	.757		
	Recreation	29	3.832	.430		
	Exercise and Sports Sciences	41	3.435	.577		
Verbal aggression	Sports Management	56	3.750	.636	1.103	0.350
	Coaching Training	54	3.614	.724		
	Recreation	29	3.834	.521		
	E Exercise and Sports Sciences	41	3.609	.622		

A statistically significant difference was not found between the groups as a result of one-way analysis of variance (ANOVA) performed with the aim of determining whether the aggression scale differed in terms of the departments of the students which they learned. As a matter of fact, the “p” value is greater than 0.05. In this context, the students of Physical Education and Sports School may have no influence on the level of aggression of the departments they have studied.

The hypothesis is rejected that there is a meaningful difference between the levels of aggression and the departments of the students of Physical Education and Sports that we had established before.



Table 5. Results of the T-Test according to the section variable of the students who participated in the survey

	Section	n	x	S.D.	t	p
Physical aggression	Individual Sports	64	3.753	.562	0.172	0.111
	Team Sports	116	3.609	.602		
Enmity	Individual Sports	64	3.744	.576	1.189	0.395
	Team Sports	116	3.663	.654		
Anger	Individual Sports	64	3.651	.666	0.396	0.422
	Team Sports	116	3.569	.649		
Verbal aggression	Individual Sports	64	3.750	.590	0.385	0.347
	Team Sports	116	3.658	.674		

There was no statistically significant difference between the groups as a result of the independent sample t test analysis conducted to determine whether the aggression level scale differed in terms of the sections of students. As a matter of fact, the “p” value is greater than 0.05. In this context, there is no difference between the aggressiveness levels of students who play individual sports and those who play team sports.

For this reason, the acceptance of the hypothesis is rejected because there is a meaningful difference between the sport and the aggression level of the students of the Physical Education and Sports School that we have established before.

Table 6. T Test results according to smoking habits of students attending the survey

	Do you smoke?	n	x	S.D.	t	p
Physical aggression	Yes	62	3.729	.5674	0.424	0.250
	No	118	3.624	.6028		
Enmity	Yes	62	3.754	.6276	0.042	0.341
	No	118	3.660	.6272		
Anger	Yes	62	3.732	.6546	0.128	0.047
	No	118	3.527	.6471		
Verbal aggression	Yes	62	3.735	.6486	0.003	0.506
	No	118	3.667	.6454		

A statistically significant difference was found between the groups as a result of the independent sample t test analysis conducted to determine the relation between smoking habits and aggressiveness levels of the students of Physical Education and Sports School. As a matter of fact, the “p” value is less than 0.05. It is seen that there is a significant difference in the anger sub-dimensions of the students compared to p.0.05 significance level. The mean score of the anger subscale of students who smoked is higher than that of non-smoker students. There was no statistically significant difference in physical aggression, hostility and verbal aggression sub-dimensions. As a matter of fact, the “p” value is greater than 0.05.

In this context, the hypothesis that there is a significant difference between smoking habits and aggression levels of the students of Physical Education and Sports School is accepted.

Table 7. T Test results according to alcohol consumption habits of the students attending the survey

	<b>Do you drink?</b>	<b>n</b>	<b>x</b>	<b>S.D.</b>	<b>t</b>	<b>p</b>
Physical aggression	Yes	55	3.844	.633	1.660	0.009
	No	125	3.579	.555		
Enmity	Yes	55	3.884	.518	3.426	0.003
	No	125	3.608	.653		
Anger	Yes	55	3.732	.622	0.930	0.063
	No	125	3.539	.662		
Verbal aggression	Yes	55	3.876	.57	0.644	0.007
	No	125	3.609	.660		

A statistically significant difference was found among the groups as a result of the independent sample t test analysis for the relation between alcohol use habits and aggressiveness levels of the Physical Education and Sports School students. As a matter of fact, the “p” value is less than 0.05. It is seen that there is a significant difference in the physical aggression, hostility and verbal aggression sub-dimensions of the students compared to p.0.05 level of significance. The level of aggression of students who use alcohol is higher than that of students who do not have alcohol habits. There was no statistically significant difference in the anger subscale. As a matter of fact, the “p” value is greater than 0.05.

The hypothesis that there is a significant difference between the smoking habits and the aggression levels of the students of the Physical Education and Sports School that we have established before was accepted.

#### 4. Conclusion and Recommendations

When the average scores of students' gender and aggression scale are examined, it is seen that there is a significant difference in the levels of significance of  $p.0.05$  in physical aggression, hostility and anger sub dimensions. The average score of male students is higher than that of female students. Scharf (2000) compared gender and aggression in his research. As a result of the research, when verbal aggression did not find a difference between the genders, it found the result of the male aggression is more about physical aggression. Researchers Giles and Heyman (2005) have addressed the relationship between gender and aggression among adolescent individuals. According to the result, the level of aggression of male individuals is higher than that of female individuals. These results support our work. The different research results in the literature also indicate that males are generally more aggressive than females.

When the average scores of the students aged from different age groups are taken into consideration, it is seen that there is a significant difference according to the  $p.0.05$  significance level. Physical aggression, anger, hostility and sub-dimensions of students aged 17-20 were found to be higher than the average age group students. Yurttaş (2016) found that the average scores of individuals aged 21-24 in physical aggression, anger, hostility and verbal aggression subscales were higher than the average scores of individuals aged 20 and below. This result does not overlap with our work.

Aggressiveness levels of Karakaya (2002) team and of the athletes who perform sports as individuals was compared and the result shows that there is not a meaningful difference between the general aggression levels of the team and the individual sportsmen. Dervent's (2007) study reveals school students' level of aggression and participation in sports activities and shows that there is no meaningful difference in the aggressiveness characteristics between the individuals who play team and individual sports. There were no significant differences in the aggression scores among the sports branches that achieved the results in support of our work.

A statistically significant difference was found between students' smoking habits and aggressiveness levels. It is seen that there is a significant difference in the anger sub-dimensions of the students compared to  $p.0.05$  significance level. The mean score of the anger subscale of students who smoked is higher than that of non-smoker students. It is also seen in our daily lives that students with smoking habits behave differently when they are not smoking.

A statistically significant difference was found between alcohol use habits and aggression levels of the students who participated in the research. It is seen that there is a significant difference in the physical aggression, hostility and verbal aggression sub-dimensions of the students compared to  $p.0.05$  level of significance. Yurttaş (2016) found that the average score, of individuals using alcohol, in physical aggression, anger and hostility subscales was higher than the average scores of non-alcohol users. This result supports our research. Alcohol, a harmful substance, appears to be aggressive to physical, mental and emotional health of individual as well as gives harm to their environment. The influence of alcohol causes the

violence and aggression that the individual is suppressing.

The family, which is considered as the first place where education begins, has an important role in children's behavior. In this context, it can be said that parents' educational level is influential on the aggressive behaviors exhibited by the athletes. Our children need to keep away from all kinds of aggressive and violent behavior and accidents at a younger age.

At the universities, various social activities can be organized to keep students from aggressive behavior and violence. By encouraging students to play sports, studies can be made about the basic philosophy of sport, love, peace, friendship and fraternity. Anyone who thinks sports is a fun should be appreciated. All items in the sport should be prevented from winning philosophy.

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